AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows. This listing of claims will replace all prior listings.

1. (CURRENTLY AMENDED) A fuel system comprising:

a fuel channel which defines ~~an~~ a central axis along a fuel flow path;

a first transducer located adjacent said fuel channel ~~and~~ off said axis and directed toward said fuel channel to direct a signal transverse to and off said axis; and

a second transducer located adjacent said fuel channel ~~and~~ off said axis and directed toward said fuel channel to direct a signal transverse to and off said axis.

2. (ORIGINAL) The fuel system as recited in claim 1, wherein said first transducer is angled to said second transducer.

3. (CURRENTLY AMENDED) The fuel system as recited in claim 1, wherein said first transducer and said second transducer are acoustic transducers which generate an acoustic signal.

4-6. (CANCELED)

7. (CURRENTLY AMENDED) The fuel system as recited in claim ~~6~~ 17, wherein said first transducer and said second transducer generate acoustic flow chaotization within said fuel channel to intensify oxygen supply to the surface of the oxygen-removing membrane.

8. (CANCELED)

9. (CURRENTLY AMENDED) The fuel system as recited in claim ~~8~~ 18, wherein said micro-channels are located within a fuel deoxygenation system.

10. (ORIGINAL) A method of reducing dissolved oxygen from within a fuel system comprising the steps of:

(1) generating acoustic flow chaotization within a liquid fuel containing a dissolved oxygen to intensify oxygen from within the liquid fuel to a surface of an oxygen- permeable membrane.

11. (ORIGINAL) A method as recited in claim 10, further comprising the steps of:

locating a first transducer off an axis defined by a fuel channel transporting the liquid fuel containing the dissolved oxygen.

12. (ORIGINAL) A method as recited in claim 11, further comprising the steps of:

locating a second transducer off an axis defined by the fuel channel transporting the liquid fuel containing the dissolved oxygen, the second transducer angled relative to the first transducer.

13. (ORIGINAL) A method as recited in claim 10, further comprising the steps of:

locating a first and second transducer off an axis defined by a fuel channel transporting the liquid fuel containing the dissolved oxygen; and

locating the first and second transducer in communication with a liquid in contact with the fuel channel.

14. (ORIGINAL) The fuel system as recited in claim 10, further comprises the steps of:

(2) communicating oxygen through the oxygen- permeable membrane, the oxygen-permeable membrane in communication with a fuel deoxygenation system.

15. (ORIGINAL) A method as recited in claim 14, wherein said step (2) further comprises the steps of:

reducing the dissolved oxygen concentration within the fuel to below 2 ppm.

16. (ORIGINAL) A method as recited in claim 10, further comprising the steps of:

(2) generating cavitation-induced phase separation within the liquid fuel.

17. (ORIGINAL) The fuel system as recited in claim 16, further comprises the steps of:

(3) communicating oxygen produced by the cavitation-induced phase separation through an oxygen-permeable membrane, the oxygen-permeable membrane in communication with a fuel deoxygenation system.

18. (NEW) A fuel system comprising:

a fuel channel which defines an axis;

an oxygen permeable membrane in communication with said fuel channel;

a first transducer located adjacent said fuel channel and off said axis; and

a second transducer located adjacent said fuel channel and off said axis.

19. (NEW) A fuel system comprising:

a fuel channel which defines an axis, said fuel channel comprises a system of micro-channels;

an oxygen permeable membrane in communication with said fuel channel;

a first transducer located adjacent said fuel channel and off said axis; and

a second transducer located adjacent said fuel channel and off said axis.

20. (NEW) A method as recited in claim 10, where said step (1) further comprises:

(a) generating an ultrasonic signal as a series of repetitive pulses within the liquid fuel.